

2, in adult males, especially in those of middle life, whose urethræ and bladders are in a tolerably healthy condition; 3, in cases where the stone is small, phosphatic, or brittle; or, if we speak with reference to age alone, it may be said that lithotripsy is to be reserved especially for those examples of stone in which the age of the patient is over fifteen or seventeen years. While, on the other hand, lithotripsy is peculiarly difficult, and sometimes wholly inapplicable: 1, when the urethra is strictured or exquisitely irritable; 2, when the bladder is very irritable, inflamed, ulcerated, contracted, hypertrophied, or sacculated, or when it is in a condition of extreme atony; 3, when the prostate is much enlarged, as so often is found to be the case in old age; 4, when a pretty large stone is associated with a narrow but healthy urethra, a condition which sometimes obtains in childhood and infancy; 5, when the stone is of very great size, or very hard, or encysted; 6, when there are a large number of calculi; 7, when the kidneys are suffering from serious organic disease, or the general health is greatly impaired."

In cases of vesical calculi in the female, those stones that "cannot be removed by forceps without dilatation, and which can be completely crushed, demand lithotripsy;" while in other cases we conclude that the vesico-vaginal operation is preferred, though it is not so stated definitely. In the treatment of "hydrocele," "the long incision" is preferred; injections of iodine being stated to be followed by quite as many failures as successes. For the relief of "varicocele" the "removal of a large tegumentary flap" from the scrotum is advised, ligation of the veins of the cord "being liable to fail altogether, and in no instance probably have either of the methods ever accomplished a complete cure."

In the securing of the pedicle after ovariectomy the "whip-cord ligature, applied as I have already directed" (by transfixion and tying separately upon opposite sides), is believed to be the method which will answer all the exigencies in the largest proportion of cases. The usual statement is made respecting the utter failure of therapeutic agents in effecting the removal of fibroid tumours of the uterus. The recent experiments of Hildebrandt¹ with ergotin subcutaneously administered may cause an entire change of opinion upon this point. "Extirpation of the uterus" is refused a place "among legitimate surgical expedients."

As a whole, Prof. Hamilton's latest work is one that will add to his already high reputation. It is not, we think, for students the best book of the kind in our language; nor can it ever be regarded as a substitute for a surgical library; but it is full of valuable practical suggestions and directions, and as the embodiment of the results of the long study and experience of an eminent surgeon it should be in the possession of all who have occasion to treat surgical diseases and injuries.

P. S. C.

ART. XX.—*Diseases of the Throat: A Guide to the Diagnosis and Treatment of Affections of the Pharynx, Esophagus, Trachea, Larynx, and Nares.* By J. SOLIS COHEN, M.D., Lecturer on Laryngoscopy and Diseases of the Throat and Chest, in Jefferson Medical College, Philadelphia, etc. etc. With 133 Illustrations on wood. 8vo. pp. xvi., 582. New York: William Wood & Company. 1872.

WE have read this work with much satisfaction and take pleasure in inviting to it the attention, not only of physicians specially interested in

¹ See this Journal, Oct. 1872, page 567.

the subjects of which it treats, but of general practitioners. It is a work adapted also to the student as well as to the practitioner. The former will find it an admirable treatise upon the affections which it considers, and the latter a practical guide to their treatment.

As will be seen by its title the treatise is a comprehensive one, and for that reason it is all the more welcome. We may say, indeed, that it is really needed. Subjects are here considered, which are intimately related to those commonly treated of in works on diseases of the throat, but which are not usually found in them, and for information concerning which, special treatises, or general works on surgery, must be consulted. A work like the one before us, therefore, if written by an intelligent, industrious, and conscientious practitioner, cannot but be a useful one. Dr. Cohen seems to possess all three of the qualities mentioned, and exhibits, moreover, as claimed in the preface, "an honest endeavour to interpret facts and observations as they appeared in the light of his own understanding." With this latter characteristic, which finds expression throughout the book, comes, naturally, a "record differing in some respects from the records of others;" but, with the ample experience of the author, this only heightens the interest of the work. We may add that, to a thorough knowledge of his subject, the author adds a readiness with his pen and a faculty for description which are noticeable everywhere, and which are by no means always inseparable from valuable medical treatises. One therefore finishes the perusal of the book with a feeling of freshness and of satisfaction, which a mere compilation, however good, could hardly afford.

A few words from the preface will give a more precise idea of the design of the work.

"The limits of a moderate-sized volume preclude the composition of an exhaustive treatise on the subject of Diseases of the Throat. It has been thought advisable, therefore, while presenting a comprehensive view of the entire field, to dwell longer upon subjects which are important by their frequency and by the fresh light shed upon them by recent investigation; and to treat concisely of those points which by their infrequency, on the one hand, or their thorough discussion in the standard medical works of the day, on the other, seem less to call for amplification."

The work contains fifteen chapters. The opening one is on diseases of the throat in general, and contains a description of the appearance of the mucous membrane of the throat in health and in slight deviations from the normal condition, and judicious cautions to physicians in regard to mistaking the result of slight irritation of the membrane for serious disease. The chapter includes a statement of the causes of irritation leading to inflammatory affections of the throat, in which the simple inhalation by non-smokers of an atmosphere impregnated with tobacco smoke is mentioned as an exciting element.

The second chapter treats of the importance of ordinary inspection of the throat, of the anatomy and the histology of the larynx, and of laryngoscopy and rhinoscopy. To these two arts an admirable guide is afforded. The general practitioner will be surprised to learn what portions of the throat may sometimes be brought to view by the use of the tongue-depressor, or even by the voluntary efforts of the patient.

"Sometimes we can even see the upper circumference of the entire larynx, especially if the epiglottis be titillated with the tip of the tongue-depressor so as to excite a slight motion of gagging. Some patients depress their tongues and open their mouths so well, that, looking down upon the parts, we can see

these structures without the use of any tongue-depressor at all. Cases are on record, few in number, it is true, in which, by such voluntary effort of the patient, a view has been obtained of the larynx down to the vocal cords."

Our author gives the following definition of the glottis:—

"They [the true vocal cords] form, with the space between their free edges, *the glottis*; their sharp borders are *the lips of the glottis*, and the chink or fissure between these lips is the *rima glottidis*. These terms should not be confounded."

Dunglison's definition of the glottis is this: "A small oblong aperture, in the larynx, comprised between the *chordæ vocales*." Palmer's is this: "A small oblong aperture situated at the summit of the larynx or wind-pipe, between the vocal chords."

These two definitions are not sufficiently comprehensive, but we are inclined to prefer a definition of the glottis which would make it an aperture, simply, as tending to simplicity. We would say, with Dr. Cohen, "close the glottis," "open the glottis," "a wide glottis," (page 59) and "changes of form produced in the glottis" (p. 63). But, instead of "open the chink of the glottis" (p. 60), we would say, *open the glottis*. Instead of "lessening the length of the chink of the glottis" (p. 63), *lessening the length of the glottis*; and we would substitute the words *the vocal cords* for the word "glottis" in the expressions, "tension in the glottis" (p. 63) and "lips of the glottis" (p. 56). Instead also of "floor of the glottis" (p. 386) we would say, *superior surface of the vocal cords*. The expression which Dr. Cohen had previously used, namely, "floor of the upper laryngeal cavity," seems to be better than "floor of the glottis." We also prefer the expression "*spasm of the larynx*" to "spasm of the glottis" (p. 396).

We present the following as a specimen of the happy faculty of description possessed by Dr. Cohen. He is speaking of the mucous membrane of the larynx.

"The epithelium is the ciliated variety found covering the whole mucous respiratory tract, with the exception of a narrow stripe of the squamous epithelium of the œsophagus, which mounts the larynx posteriorly, continues down the internal face of its posterior wall, and covers the free portion of the true vocal cords from one end to the other. On the inferior face of the cords, the ciliated epithelium is again encountered."

In chapters III., IV., V., VI., and VII., are considered Erythematous, Phlegmonous, Ulcerative and Membranous Sore-throats, Diphtheria, the Sore-throats of the Exanthemata, the Syphilitic Sore-throat, and the Sore-throat from Burns and Scalds.

In tonsillitis, Dr. Cohen thinks highly of the scarification or puncture of the inflamed gland.

"A good method is to pierce the tonsil in its central portion with a long, narrow, sharp-pointed bistoury, and to cut the instrument out, horizontally, by an incision through the gland into the mouth."

Although these incisions are not universally recommended, he feels convinced that they are very beneficial. The relief is often immediate, and the suppurative process is frequently averted.

A few cases are appended to the description of this affection and termed "Ulcerative Tonsillitis." We do not perceive that the suppurative process took place in these cases, and yet, if there was simply superficial ulceration of the tonsils, the cases do not illustrate any pathological condition described by the author.

The remarks on Membranous or Herpetic Sore-throat, and on Diphtheria, are excellent, and the same may be said of the chapters on the Sore-throats of the Exanthemata, on Syphilitic Sore-throat, and on Sore-throat from Burns and Scalds.

Dr. Cohen does not recognize the scrofulous diathesis as an origin of deep ulcerations of the pharynx and larynx: at all events, he makes no mention of it as a source of such lesions, although he remarks upon a destructive process in the nasal cavity which is engrafted upon this diathesis. But some intelligent observers certainly consider that this condition of the system may be the origin of pathological processes in the throat which may approach, in destructive action, those met with in the later forms of syphilis. It must, however, be acknowledged that, frequently, the term scrofulous is employed because no special cause for the lesions can be discovered. It is, moreover, very possible that some of these cases may be really due to syphilis, the earlier manifestations of which were either so slight as to be overlooked, or were subdued by remedies, given soon after the appearance of the primary sore, in an amount not sufficient to entirely eradicate the constitutional affection. The determination of the cause in such cases must therefore, necessarily, be exceedingly difficult.

Professor Isambert, of the Paris School of Medicine, has contributed to recent numbers of *L' Union Médicale*, a series of articles on the strumous ulcerations of the pharynx and larynx, and the essay has been published in the *Practitioner* for January, 1872. In these papers a distinction, of obvious clinical and therapeutic importance, is drawn between those lesions of the larynx and pharynx which depend on specific infection, or on tuberculosis, or on malignant degeneration, and those which, more benign in their course, are of simple strumous origin. The writer says that he acquired his knowledge of this discrimination through the importance of anti-syphilitic treatment against certain ulcerations, and from the discovery that tonics and not alteratives were needed. Admitting that in a certain number of cases, the scrofulous lesions may be complicated by syphilitic or tuberculous manifestations greatly involving the diagnosis, the author gives characteristic signs by which to determine the more benign type of the disease.¹

In M. Mandl's late work,² "*Angine Scrofuleuse*" may be found mentioned, and we think it worth while to translate a portion of the remarks made upon this subject.

"Hamilton first, and after him several authors (Fougère, Isambert), have described an ulcerative angina of a scrofulous nature. The affection commences in an insidious manner; the tissues assuming at this stage a violet or wine color. Examination of the throat brings to view a yellow pimple which soon ulcerates. There exist sometimes other concomitant manifestations of a scrofulous nature, such as tonsillitis. The soft palate is more frequently the seat of an ulcerative process, according to Fougère, and the posterior wall of the pharynx according to Isambert; then come the pillars, the uvula, and the tonsils. The edges of the ulcerations, which are not very deep and are indolent, are thin, rounded, irregular, sinuous and fringed. The base is uneven, mammillated, fungous, sometimes grayish and sanious, at other times yellowish and covered with muco-purulent matter. The mucous membrane in the vicinity of the ulceration is somewhat inflamed, and occasionally fungous granulations are noticed. The honey-combed and mammillated appearance of these ulcerations is almost identical with that of the *plaques muqueuses*. The submaxil-

¹ Quoted from the Boston Medical and Surgical Journal of March 28, 1872.

² *Traité Pratique des Maladies du Larynx et du Pharynx*.

lary and parotid glands are sometimes engorged; there is dysphagia, the food returns through the nose, and the voice is nasal. The course is chronic, and perforations take place, followed by cicatrices, bridles, and especially adhesions between, for instance, the veil of the palate and the posterior wall of the pharynx.

"All observers are not agreed as to the scrofulous nature of this affection. Some (Med. Soc. of Vienna, 17th February, 1871) see in these deviations from the normal condition only the result of hereditary syphilis. This remarkable circumstance may be cited in support of their opinion, namely, that these ulcerations are met with most frequently in adults, and never in infancy, so susceptible to scrofulous affections. Those who defend their scrofulous character put forward as an argument the inefficiency and even the danger of iodo-mercurial preparations; while hygienic influences, and especially cod-liver oil, in large doses, give the very best results. But it is known that cases of syphilis occur, as Dolbeau has remarked, in which tonics alone are employed, and in which mercurial preparations are harmful, as all physicians admit. This question, therefore, seems to me to merit constant investigation."

Semeleder also¹ says:—

"Scrofulosis gives occasion in some cases to diseases of the larynx. Hitherto there have only been observed sclerosis and increase of volume of the mucous membrane, and of the submucous cellular tissue; these may produce obstinate constrictions; but they may also, without doubt, proceed to ulceration."

Then follows an account of the case of a girl, of fourteen years of age, who had ulcerations upon the posterior wall of the pharynx and upon the soft palate. Local treatment was followed by cure with an adhesion of the soft palate to the posterior wall. The patient subsequently had a large, deeply-burrowing ulcer, upon the dorsum of the tongue. Syphilis was suspected; but an examination, and treatment by mercurials, gave negative results. A cure was, however, effected by iodide of potassium internally, and by a solution of iodine and glycerine locally. Concerning this case, Smeleder remarks:—

"For simple lupus the development and the cure were too speedy. In such infiltrations the diagnosis, especially between syphilis, lupus, and scrofulosis, is often very difficult."

To return to our author. The special affections of the tonsils, the palate, and uvula, the pharynx, and the œsophagus, are next treated of in separate chapters.

In the removal of the tonsils, when permanently enlarged, Dr. Cohen prefers excision by the knife, assisted, in the usual manner, by the double vulsellum, to treatment by iodine, etc., by caustics, or by excision with any of the various tonsillotomes.

"The subject of cleft palate, though belonging to the surgery of the mouth, rather than to that of the throat, is mentioned here, merely to draw attention to the success attained in splitting the edges, instead of paring them, the operation being believed to be unique in that particular."

In speaking of naso-pharyngeal tumours, and the operations for their removal, Dr. Cohen refers to the method proposed by Langenbeck, which consists in the resection of the nasal process of the upper maxillary bone and the nasal bone. This operation is not, however, we may remark, that adopted by Langenbeck for the removal of tumours resembling the one removed by Verneuil, in the case copied by Dr. Cohen from the *Gazette des Hôpitaux*. To these tumours Langenbeck gives the name retro-max-

¹ Caswell's translation, p. 161.

illary, considering them much more formidable than the ordinary nasopharyngeal polypi, and has devised for their removal his osteo-plastic resection of the upper jaw, which exposes, in a wonderful manner, the various ramifications of these truly polypus-like growths, and enables the operator to replace the bone after their removal. (*Deutsche Klinik*, 1861, p. 281.) Langenbeck employs this operation occasionally, also, for nasopharyngeal polypi.

The affections of the nasal passages are satisfactorily treated of in a chapter of eighty-two pages. The author's experience in the study and treatment of these troublesome affections has been ample, and its record is most welcome.

In the portion relating to coryza the following statement appears:—

"In the healthy state the mucous membrane of the nose does not secrete mucus, or even serum. Many individuals have no occasion at all to use the handkerchief for the removal of any nasal secretion, unless it be excited by the inspiration of dust, irritating vapours, etc. The membrane is constantly moist, it is true, but it is not by reason of any secretion, but in consequence of an absorption of the moisture condensed upon it from the expiration. When the membrane is chilled by the cold, be this by its inherent properties, or by the influence of the terminal fibrilla of the nervous system, the mucous membrane no longer absorbs this halitus of the breath, and a portion of this moisture accumulates for a while in the tissue of the mucous membrane, or just beneath it, giving rise to the sense of puffiness or fulness so familiar to all who have suffered from the complaint. After a while these tissues become saturated, and will take up no more fluid, and a process of exosmosis is set up by which the watery constituents of the fluids coursing in its tissue are directed towards the surface, and drip from the nostrils, constituting the characteristic discharge of coryza, which is at first mere water, the exhalation of the moisture in the expired breath."

We confess to reading the above with some surprise. The mucous membrane of the nasal cavity proper, is certainly richly supplied with glands, and we have supposed that they secreted, normally, some sort of fluid.

After a short chapter on the affections of the frontal sinus, comes one on the affections of the larynx and trachea. These receive the consideration due their importance, and one hundred and seventy-four pages are devoted to them. It is probable that the author's experience has been greater in these affections than in any of the others of which the work treats, and this chapter is therefore worthy the special attention of the reader.

Regarding laryngeal tuberculosis, as a primary affection, Dr. Cohen says:—

"The author discards altogether the notion of any distinct disease to be called laryngeal phthisis, whether it be the tuberculous ulceration of the laryngeal mucous membrane so often observed in general phthisis early in the disease, or whether it be the extensive ulcerative chondritis and perichondritis of the older authors. It is altogether doubtful if ever a case existed in which tuberculous disease was confined to the laryngeal structures.

"Simple chronic laryngitis, catarrhal or ulcerative, is often a curable affection; but, on account of its resistance to treatment, or its persistence in spite of it, or its total neglect, proceeding gradually from bad to worse, it will produce the subjective symptoms, and, for that matter, all the objective symptoms also, which writers have been pleased to ascribe to laryngeal phthisis."

And with regard to a deposit of tuberculous matter in the larynx in persons affected with phthisis:—

"The most he has seen, and that very rarely indeed, was one or two, or perhaps as many as three or four, isolated, white spots, the size of a large pin's head, which, in cases of slowly progressive pulmonary tuberculosis, retained their position and appearance upon the mucous membrane of the laryngeal walls, without change, for months and months."

Rokitansky's opinion is very decided against the idea of a distinct tuberculous disease of the larynx. He says:—

"Tuberculosis of the larynx, as a primary and independent affection, is so extremely rare, that we feel inclined to doubt its existence. It is almost invariably developed as a consequence of pulmonary tuberculosis, and then, as a general rule, not until the affection has established itself as pulmonary phthisis, and made considerable progress."

In regard to this secondary deposit of tubercle in the larynx, Rokitansky says, elsewhere,—

"The most common position of tubercle in the air passages (where it is very commonly met with), is the larynx."

The majority of modern pathologists agree, as we believe, with Rokitansky on this point. Of those less modern, Louis may be mentioned as holding a different opinion. He says:—

"I have not, in a single instance, met with tuberculous granulations in the substance or on the surface of the epiglottis, larynx, or trachea; so that inflammation must be regarded as the most frequent cause of the ulceration of those parts."

Of the treatment of croup, Dr. Cohen says:—

"The main principle in view is to sustain strength, while assisting the patient through the natural course of the disease."

He relies principally upon nourishing diet and tonic treatment, with the free use of steam, and, in the severer cases, upon stimulation with alcohol and carbonate of ammonia, and upon the inhalation of the vapor of lime. When an emetic seems to be indicated, he employs alum.

"I have never had occasion to resort to tracheotomy to save the life of a child with croup. . . . It is due to the treatment above narrated to say, that I have seen the life of a patient preserved through it, if not by means of it, for whom the performance of the operation of tracheotomy had been declined by more than one surgeon, as offering no chance of a successful result."

The important subject of growths in the larynx occupies 46 pages.

Concerning the influence of phthisis in the development of laryngeal neoplasms, Mackenzie states, that "neither syphilis nor phthisis, nor any other constitutional condition, appears to favour the growth of these neoplasms."

"My own experience differs very markedly from that of the author quoted. Leaving out of consideration, as he does, those 'imperfect papillary growths' which 'occasionally appear on the posterior wall of the larynx, and on the mucous membrane covering the vocal cords and the inner surface of the arytenoid cartilages in the latter stages of laryngeal phthisis'; and although I do not find with him that 'this is the exception', but rather a frequent occurrence, I have met with a large proportion of cases in which distinctly formed growths, of circumscribed outline, and often of tolerably large size, existed in cases of phthisis at a very early stage, as well as in cases where the ravages of the disease were readily detected on physical examination of the chest."

In a subjoined table of sixty-six cases of growths, occurring consecutively in Dr. Cohen's private practice during the last five years, twenty-two cases occurred in patients with phthisis.

There seems to be a marked difference of opinion among observers regarding this point. While a few, such as Tobold and Mandl, coincide with Dr. Cohen, others, and as we believe the majority, agree with Mackenzie.

It would be satisfactory to have seen a more complete table of the cases of growths which have occurred in our author's practice, in which were stated the age, sex, and occupation of the patient, and the means of removal employed.

Dr. Cohen makes mention of the method of restoring the voice in paralytic aphonia by the external manipulation of the larynx, described by Dr. Oliver in the No. of this Journal for April, 1870, apparently with the impression that Dr. O. supposed that full approximation of the arytenoid cartilages could be made by pressure on the wings of the thyroid cartilage. This, however, is not the case. In the article referred to, partial approximation, only, of the cords was supposed to be produced. Closer approximation was believed to be effected by the action of the in-going current of air upon the cords, in consequence of their valvular form. It seems probable that the means employed were, of themselves, instrumental in exciting the action of the vocal cords, for, in more than one of the cases reported, a vocal sound could be produced while pressure on the wings of the thyroid was being made, and could not be elicited when pressure was removed. Moreover, the fact that sound was produced by inspiration, before it could be produced by expiration, seems to prove that this valvular form of the cords was partly instrumental in exciting their action. It is possible that the action of the laryngeal muscles is stimulated by the manipulation, and that approximation of the cords is furthered thereby. This, if true, would go to show that the method has a value, and that there is little, if any, risk to the vocal apparatus incurred by employing it.

Our author mentions a very large epiglottis as a possible cause of spasmodic cough. Three cases of this affection in three brothers are related, in each of whom the epiglottis was found to be of unusual size. The spasms occurred generally at the table.

"I feel inclined to the opinion that the epiglottis of these gentlemen sometimes becomes impacted into the larynx in deglutition, thus producing the spasm of suffocation; a condition which I have known to occur repeatedly in a young child who was subject to suffocative paroxysms, and whose mother I taught the method of relief by running her finger down beneath the epiglottis and pulling it up. This little fellow was also subject to spasmodic cough. A similar cause excites spasmodic cough in a little child under treatment at the moment of writing.

"A spasmodic cough, of less intensity, sometimes occurs in affections of the ear, the influence being conveyed, probably, through the chorda tympani nerve. Consequently, in cases of obstinate cough, without sufficient cause for it appearing in the throat, the condition of the organs of audition should be carefully examined into."

The last chapter of the work treats of diseases of the neck affecting the deeper tissues of the throat secondarily, such as tumours of the neck, mumps, affections of the thyroid and thymus glands, etc.

A convenient table of reference to the subjects treated of in the text follows, and the book ends with a copious index.

We have only to add that the mechanical portion of the book is excellent; that the paper and letter-press, and the illustrations, which are plentifully supplied, are all that could be desired, and that the volume is, in all respects, a handsome one.

H. K. O.